

REMARKS

Claims 1-5 and 9 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Matsushima et al. (US 2001/0013852), claims 6-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsushima et al. in view of Yamaguchi (US 6,552,709), and claim 10 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsushima et al. in view of Kim (US 6,342,876). Applicants respectfully traverse these rejections as being based upon references, both singly and combined, that neither teach nor suggest the novel combination of features recited in independent claims 1, 4-6, and 9.

Independent claims 1, 4, 5, and 9 all recite either a method of or an apparatus for driving a liquid crystal display panel including “wherein the gate start pulse has the same width as that of the gate signals and is overlapped with a first one of the gate signals.” In contrast to Applicants’ claimed invention, Matsushima et al. clearly discloses, in FIG. 7, a gate start pulse SPG having a pulse width 4T and a pulse having a pulse width T is generated every two scanning lines G1•G2. Accordingly, Applicants respectfully assert that Matsushima et al. fails to teach or suggest either a method of or an apparatus for driving a liquid crystal display panel including “wherein the gate start pulse has the same width as that of the gate signals and is overlapped with a first one of the gate signals,” as recited by independent claims 1, 4, 5, and 9. Thus, Applicants respectfully submit that Matsushima et al. fails to anticipate the features of independent claims 1, 4, 5, and 9, and hence dependent claim 2, 3, and 10.

The Office Action admits that Matsushima et al. “does not specifically teach a dual gate start pulse generator pre-charging the pixel cells prior to charging data signals to the source line.”

Thus, the Office Action relies upon Yamaguchi for allegedly teach “a dual gate start pulse generator (SP2) pre-charging the pixel cells prior to charging data signals to the source line (col. 7, lines 20-60).” As a result, the Office Action alleges that “it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the dual start pulse generator as taught by Yamaguchi in the system of Matsushima in order to minimize flickering noise.” Applicants respectfully disagree.

First, Applicants respectfully assert that neither Matsushima et al. nor Yamaguchi teach or suggest anything regarding “a dual gate start pulse generator,” as recited by independent claim 1, 6. For example, in contrast to the Office Action’s allegations, Yamaguchi teaches using a first start pulse generating circuit 31 for generating a first start pulse SP₁ to a data electrode driving circuit 23, and a second start pulse generating circuit 33 for generating a second start pulse SP₂ to a scanning electrode driving circuit 24. In addition, as admitted by the Office Action, Matsushima et al. fails to teach or suggest a dual gate start pulse generator. Accordingly, Applicants respectfully assert that neither Matsushima et al. nor Yamaguchi, whether taken singly or combined, teach or suggest “a dual gate start pulse generator,” as recited by independent claim 6, and hence dependent claims 7 and 8.

Second, Applicants respectfully assert that the Office Action’s alleged motivation to modify Matsushima et al. (i.e., to minimize flickering noise) is neither taught nor suggested anywhere in either of Matsushima et al. or Yamaguchi. For example, Yamaguchi clearly teaches, in col. 3, lines 36-39, that an object of the invention is to provide a display driving method and device capable of displaying a character, an image or a like immediately after turning a power supply ON. Accordingly, Applicants respectfully assert that Yamaguchi is

completely silent with respect to teaching using “a dual gate start pulse generator precharging the pixel cells prior to charging data signals on the source line,” as recited by independent claim 6, and hence dependent claims 7 and 8.

Applicants further assert that the Office Action does not rely on Kim to remedy the deficiencies of Matsushima et al., as detailed above. Moreover, Applicants respectfully assert that Kim cannot remedy the deficiencies of Matsushima et al., as detailed above.

MPEP 2143.01 instructs, “[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention, where there is some teaching, suggestion or motivation to do so found in either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art.” Moreover, MPEP 2143 instructs that “[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless that prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).” Accordingly, Applicants assert that the Office Action has not provided any motivation for one of ordinary skill in the art to modify the teachings of Matsushima et al. with the teachings of Yamaguchi to achieve the invention of independent claim 6, as detailed above, and hence dependent claims 7 and 8. Thus, since the Office Action fails to meet the requirements for establishing a *prima facie* case of obviousness as to independent claim 6, claim 6 is not obvious.

In accordance with the above remarks, Applicants respectfully assert that the rejections under 35 U.S.C. §§ 102(e) and 103(a) should be withdrawn because Matsushima et al. and Yamaguchi, whether taken singly or combined, neither teach nor suggest the novel combination of features of independent claims 1, 4-6, and 9, and hence dependent claims 2, 3, 7, 8, and 10.

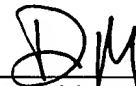
CONCLUSION

In view of the foregoing, Applicants respectfully request reconsideration of the application, and the timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of the response, the Examiner is invited to contact the Applicants' undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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